Remarks

Applicants thank the Examiner for discussing the present application in an interview on May 26, 1997. During the interview, new claims directed at methods for detecting the presence of a non-viral organism were discussed.

Newly added claims 486-630 are directed to methods for determining whether one or more target non-viral organisms may be present in a sample. The claims focus on detecting a target nucleic acid sequence region characteristic of an organism or group of organisms. The location of where the target region can be found is provided in the claims. Dependent claims more particularly describe the target region and/or the organism being targeted.

Support for the different regions can be found, for example, in claims: claims 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326 and 328, and the examples provided throughout the application reference coordinate positions on *E. coli* 5S rRNA, 16S rRNA or 23S rRNA. In some instances a region referenced in claims 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326 and 328 was expanded taking into account the region provided in the claims and an upper or lower limit provided elsewhere in the application.

In new claims 486-491, region 60-100 of 16S rRNA or the encoding DNA supported by claim 302 was expanded to region 60-105 of 16S rRNA or the encoding DNA which is supported by claim 137; region 405-480 of 16S rRNA or the encoding DNA supported by claim 308 was expanded to region of 405-490 16S rRNA or the encoding DNA which is supported by page 57, line 32 (mentions region 450-490); region 600-670 of 16S rRNA or the encoding DNA supported by claim 310 was expanded to region 600-675 of 16S rRNA or the encoding DNA which is supported by page 61, line 28 (mentions region 630-675); region 820-860 of 16S rRNA or the encoding DNA supported by claim 312 was expanded to region 820-870 of

16S rRNA or the encoding DNA which is supported by claim 143 (mentions region 830-870); region 980-1050 of 16S rRNA or the encoding DNA supported by claim 314 was expanded to region 980-1060 of 16S rRNA or the encoding DNA which is supported by page 50, line 28 (mentions region 1025-1060); region 270-390 of 23S rRNA or the encoding DNA supported by claim 318 was expanded to region 270-405 of 23S rRNA or the encoding DNA which is supported by page 80, line 12 (mentions region 365-405); region 535-560 of 23S rRNA or the encoding DNA supported by claim 320 was expanded to region 535-575 of 23S rRNA or the encoding DNA which is supported by page 43, line 5 (mentions region 540-575).

In addition regions 65-108 of *E. coli* 5S rRNA, 705-735 of *E. coli* 16S rRNA, and 1125-1155 of *E. coli* 16S rRNA which are not provided in claims 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326 and 328 were added. Support for the region 65-108 of *E. coli* 5S rRNA is provided, for example, on page 55, lines 15-19; support for the region 705-735 of *E. coli* 16S rRNA is provided, for example, in Figure 9, and page 74, lines 15-16; and support for the region 1125-1155 of *E. coli* 16S rRNA is provided, for example, in Figure 9, and page 89, lines 22-24.

Claims 486, 488, and 490, refer to hybridization assay means. Such means are directed to oligonucleotides probes, and equivalents thereof as is apparent based on the specification, used in a hybridization assay. Oligonucleotide probes used in a hybridization assay to detect the presence of non-viral oligonucleotide include oligonucleotides containing a label, for example, see pages 21-22, lines 23-1. Equivalents of such probes include modified oligonucleotides containing a sufficient number of nitrogenous bases able to specifically hydrogen bond with nitrogenous bases found in

nucleic acid (*e.g.*, hydrogen bond with thymine or uracil, adenine, cytosine, or guanine).

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Respectfully submitted,

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